

Data Analysis and Probability
Lesson 28 Worksheet
Math for Standards

Name _____

Date _____

1. The following info represents the average time studying per week in hours with the final grade earned in a math class. Create a scatter plot and put in a line of best fit, then answer the questions. (8 points)

(6, 80), (1, 65), (5, 85), (2, 60), (5, 70), (3, 70), (9, 95), (8, 90), (3, 80), (7, 70), (4, 65), (8, 75), (4, 80), (7, 85), (9, 85), (10, 95), (1, 75)

a. Show your graph to Mr. Lamb to verify you have graphed it. _____

b. What correlation exists?

c. What is the correlation value (r)?

d. If you spent 5 hours a week studying, what grade would you expect?

2. Sketch an example of a scatterplot that has a positive correlation. (3 points)

3. Sketch an example of a scatterplot that has no correlation. (3 points)

Open-Ended Question: Make sure as you answer the open-ended question that you show your work AND explain how you know you are doing the correct work. YOU MUST EXPLAIN WHAT YOU ARE DOING!!!

The data below represents the number of megapixels and the prices of selected cameras sold through an internet retailer in December 2004.

# Megapixels	5.1	4.0	3.2	8.2	3.0	4.0	3.1	3.2	4.0	5.0
Price	499	449	199	1,599	219	347	379	99	249	599

A. Construct a scatterplot and line of best fit for the data. Show your graph to Mr. Lamb to verify you have graphed it if you graphed it in your calculator. _____

B. Describe the type of correlation shown in the table and the scatterplot.

C. Examine the line of best fit you found. Describe any reasons that it may not be helpful in interpreting the scatterplot. Does this model hold for cameras sold today?